# BUSINESS MEETING

### BEFORE THE

# CALIFORNIA ENERGY COMMISSION

| In  | the   | Matter   | of: |  |
|-----|-------|----------|-----|--|
| Bus | sines | ss Meet: | ing |  |

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, MARCH 23, 2011 10:00 A.M.

Reported by: Kent Odell

# Commissioners Present

Robert B. Weisenmiller, Chair James D. Boyd, Vice Chair Karen Douglas Carla A. Peterman

# Staff Present:

Michael Levy, Chief Counsel
Melissa Jones, Executive Director
Lyn Sadler, Public Advisor
Harriet Kallemeyn, Secretariat
Kristin Driskell, Chief Counsel's Office

|                | Agenda | Item |
|----------------|--------|------|
|                |        |      |
| Joe Loyer      | 2      |      |
| Eric Solorio   | 3      |      |
| Atlas Hill     | 4      |      |
| Darcie Chapman | 5      |      |
| Rizaldo Aldas  | 6      |      |
| Dustin Davis   | 7      |      |
| Tobias Muench  | 9      |      |
| John Nuffer    | 10     | )    |
| Garry O'Neill  | 10     | )    |
|                |        |      |

#### Also Present

# Interested Parties:

John A. McKinsey, Esq., Counsel, Pio Pico Energy Center, LLC Gary Chandler, President, Pio Pico Energy Center, LLC Caroline Quinn, Delta Diablo Sanitation District Michael Theroux, JDMT Steve Eckhardt, Linde LLC John Menke, representing himself, (State Water Board)

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|      | a.           | AFFORDABLE COMFORT, INC. (ACI). Possible approval of Contract 400-10-009 for \$20,000 to co-sponsor the ACI National Home Performance Conference held in San Francisco, March 28 - April 1, 2011. (ERPA funding.)   |      |
|      | b.           | NATIONAL RENEWABLE ENERGY LABORATORY. Possible approval of Amendment 3 to Contract 500-05-027 with the National Renewable Energy Laboratory for a 12-month no-cost time extension. This project will develop three turnkey reference designs for photovoltaic inverters that will expedite the use of distributed renewables and lower the cost of deploying photovoltaics in California. |      |
|      | С.           | SAN FRANCISCO PUBLIC UTILITIES COMMISSION. Possible approval of Amendment 1 for Grant PIR-06-001 with San Francisco Public Utility Commission for a one-year no-cost time extension and contractual amendment to reduce the demonstration period to six months, and revise budget due to additional labor and increase in match funds.  |      |
| 2.   | Hayw<br>requ | OF HAYWARD. Possible approval of the City of vard's locally adopted building energy standards to tire greater energy efficiency than the 2008 Building egy Efficiency Standards.  | 7    |
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Pio Pico project.

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- 11. PUBLIC INTEREST ENERGY RESEARCH (PIER) ANNUAL REPORT. Postponed Possible approval of the Public Interest Energy Research (PIER) 2010 Annual Report to the Legislature.
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- a. California Communities Against Toxics et al v. South Coast Air Quality Management District (Los Angeles County Superior Court, BS124624);
- b. Western Riverside Council of Governments v. Department of General Services (Riverside County Superior Court RIC10005849);
- c. In the Matter of U.S. Department of Energy (High Level Waste Repository), (Atomic Safety Licensing Board, CAB-04, 63-001-HLW);
- d. Public Utilities Commission of California (Federal Energy Regulatory Commission, Docket No. EL10-64-000); and Southern California Edison Company, et al. (Federal Energy Regulatory Commission, Docket No. EL10-66-000);
- e. California Energy Commission v. Superior Court (WRCOG) (California Court of Appeal E052018);
- f. California Unions for Reliable Energy and William Perez v. California Energy Resources Conservation and Development Commission (California Supreme Court, S189402);
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- 2 MARCH 23, 2011 10:03 a.m.
- 3 CHAIRMAN WEISENMILLER: Good morning. Let's
- 4 start with the Consent Calendar.
- 5 VICE CHAIR BOYD: Move Consent.
- 6 COMMISSIONER DOUGLAS: Second.
- 7 CHAIRMAN WEISENMILLER: All in favor?
- 8 (Ayes.)
- 9 It's been passed unanimously.
- 10 Let's go on to the second item. Item 2.
- 11 City Of Hayward. Possible approval of the City of
- 12 Hayward's locally adopted Building Energy Standards to
- 13 require greater energy efficiency than the 2008
- 14 Building Energy Efficiency Standards. And Joe is
- 15 going to go. Thanks, Joe.
- 16 MR. LOYER: Commissioners. With this
- 17 ordinance, the City of Hayward ensures that the newly
- 18 constructed residential projects under their
- 19 jurisdiction will exceed the state standards by 15
- 20 percent or more by using the Green Point rated
- 21 checklist developed by Build it Green. The City
- 22 estimates that newly constructed commercial buildings,
- 23 as well as additions and alterations, will exceed the
- 24 standards by 15 percent or more under the Hayward
- 25 Green Building Checklist for private and

- 1 nonresidential development. Staff as reviewed the
- 2 ordinance and has determined that it complies with all
- 3 necessary requirements of Title 24 Part 1, Section
- 4 10106, and recommends the application be approved and
- 5 the Energy Commission Resolution be signed. I am
- 6 available to answer any questions you may have.
- 7 CHAIRMAN WEISENMILLER: Commissioners, do
- 8 you have any questions or comments?
- 9 COMMISSINER PETERMAN: No questions. I
- 10 support more energy efficiency.
- 11 COMMISSIONER DOUGLAS: We always like to see
- 12 when local governments exceed our building standards
- 13 and that always demonstrates to us how many ways we
- 14 could in the next round make our standards more
- 15 effective and tighter, as well. So, if there are no
- 16 more comments or, Commissioner.
- 17 VICE CHAIR BOYD: Well, I was just going to
- 18 say it's getting nice to see this as the norm instead
- 19 of the exception; so many communities have now done
- 20 this and we've seen so many that it seems to be
- 21 becoming the norm and not the exception, and that's
- 22 just really good for moving the program forward and
- 23 this whole issue forward, as you both have indicated.
- 24 So, I would be glad to second your motion.
- 25 COMMISSIONER DOUGLAS: Thank you,

- 1 Commissioner Boyd.
- 2 CHAIRMAN WEISENMILLER: And I will make one
- 3 comment. Officials from the City of Hayward had
- 4 planned to be here today and ran into train issues,
- 5 and I think there was some potential he would be on
- 6 the line and I just want to double-check. No. So,
- 7 anyway, I just wanted to make sure of that and, as I
- 8 say, I know he wanted to be here today, unfortunately
- 9 that didn't work. But, anyway, so with that, we have
- 10 a motion -
- 11 COMMISSIONER DOUGLAS: I will make a motion
- in a moment, I will just comment on your comment,
- 13 Chairman Weisenmiller, that I'm pleased to hear that
- 14 they had planned to take the train it's unfortunate
- 15 they didn't make it, but, again, the use of public
- 16 transportation by the representatives of the City of
- 17 Hayward is noted. So, I will move approval.
- 18 VICE CHAIR BOYD: Second.
- 19 CHAIRMAN WEISENMILLER: Okay, all in favor?
- 20 (Ayes.) This also passes unanimously.
- 21 Item 3. Pio Pico Energy Center (11-AFC-1).
- 22 And Eric Solorio is going to talk, and this is a
- 23 possible adoption of the Executive Director's data
- 24 adequacy recommendation for the Pio Pico Energy
- 25 Center. The project is a 300 megawatt simple cycle

- 1 generation facility that would use three natural gas-
- 2 fired combustion turbine generators. The project
- 3 would be located on 10 acres of disturbed land in an
- 4 unincorporated area of Southwestern San Diego County,
- 5 known as Otay Mesa. Please. Eric?
- 6 MR. SOLORIO: Good morning, Chairman and
- 7 Commissioners. I'm Eric Solorio, staff's Project
- 8 Manager assigned to the Pio Pico Energy Center
- 9 Project. I'm going to provide a brief description of
- 10 the project, followed by the results of staff's Data
- 11 Adequacy Review and the Executive Director's
- 12 recommendation.
- 13 The Pio Pico Energy Center is proposed as a
- 14 nominal 300 megawatt natural gas-fired simple cycle
- 15 generating facility. The current application for
- 16 certification replaces the previously proposed project
- 17 that was withdrawn on December 10<sup>th</sup>, 2010. The new
- 18 project site is approximately 10 acres of disturbed
- 19 land located on Alta Road, an unincorporated area of
- 20 Southwestern San Diego County, known as Otay Mesa.
- 21 The project would include three General Electric
- 22 LMS100 natural gas-fired combustion turbine
- 23 generators, together with air emissions control
- 24 equipment. The facility would connect to the existing
- 25 Otay Mesa Power Plant switchyard via a new overhead

- 1 230 KV transmission line. The project is proposed to
- 2 be located directly next to the Otay Mesa Power Plant.
- 3 Staff has completed its Data Adequacy Review
- 4 of the Application For Certification and has
- 5 determined that it does not meet all the requirements
- 6 listed in Title 20 of the California Code of Regs.,
- 7 Section 1704, Appendix B. Of the 23 technical
- 8 disciplines reviewed, we believe the information
- 9 contained in the AFC was deficient in nine areas,
- 10 which are air quality, biological resources, cultural
- 11 resources, land use, paleontological resources,
- 12 project overview, soils, transmission system design,
- 13 and water resources. Therefore, staff asks the
- 14 Commission to find the AFC inadequate and adopt the
- 15 list of deficiencies which were filed together with
- 16 the Executive Director's Data Adequacy recommendation
- 17 on March 10<sup>th</sup>, 2011. Thank you.
- 18 COMMISSIONER WEISENMILLER: Any comments
- 19 from the Applicant?
- 20 MR. MCKINSEY: Thank you, Commissioners. My
- 21 name is John McKinsey and I am counsel for the
- 22 Applicant, Pio Pico Energy Center, LLC. With me is
- 23 Gary Chandler, President of Pio Pico Energy Center,
- 24 LLC. Several of you know both of us and have seen us
- 25 here in different iterations. One comment I wanted to

- 1 make, well, two, relate to the same issue and, when we
- 2 were here under the previous project, it was data
- 3 inadequate, as well, and I think, to put it correctly,
- 4 we were admonished for the level of inadequacy that
- 5 the AFC had. This one, though you hear nine out of 23
- 6 areas, substantially most of the deficiencies are
- 7 easily correctable and, in some cases, they are an
- 8 example of where the requirements get fairly specified
- 9 and unique to the unique project and they don't really
- 10 reflect a lack of effort. Instead, the AFC had a lot
- of working over and it's a very complete document.
- 12 There are four issue areas that we've had
- 13 discussions with the staff on, and I just want to tell
- 14 you what they are: biology, cultural, water resources,
- 15 and transmission system design. In those areas, we
- 16 think we've reached an understanding of what we're
- 17 going to provide that isn't necessarily identical to
- 18 what the information specified in the Data Adequacy
- 19 Recommendation is. And I just wanted to alert you to
- 20 that so that, when we make that filing, if there is
- 21 still an issue lurking in one of those issue areas, we
- 22 may be before you, indicating that we think what we've
- 23 provided is good enough to meet the requirements, but
- 24 that's certainly not something we have to grapple with
- 25 today because our intent is to make a filing in early

- 1 to mid-April, at the latest, that we believe now will
- 2 make the project data adequate.
- 3 And then, I wanted to give Mr. Chandler a
- 4 moment to say hi to you.
- 5 MR. CHANDLER: Good morning, Commissioners.
- 6 The last time I was sitting here, I thought we would
- 7 be back in 30 days with a complete or a data
- 8 adequate AFC on our other site, but as you may be
- 9 aware, we ran into some issues, particularly
- 10 biological kinds of issues on the other site that was
- 11 brought to us by the City of Chula Vista. And we made
- 12 a decision to abandon that site, I think, which was a
- 13 good decision and we were very fortunate to find
- 14 another site that had not previously been available
- 15 about two miles from that same location that connected
- 16 into the same transmission line and into an existing
- 17 substation, which allowed us, then, not to have to
- 18 build a new substation. We took that to CAISO, they
- 19 agreed it was not a material change in our application
- 20 with them, we also went back to San Diego Gas and
- 21 Electric and discussed the situation with them, they
- 22 agreed to a deferral of the completion date of the
- 23 project, so we were able to acquire the land, and
- 24 everything just kind of fell into place. But the new
- 25 site is much better, it's a fully disturbed site, it

- 1 is a heavy industrially zoned and, so, from an
- 2 environmental standpoint, it's a much better site.
- 3 Just one additional comment I would make
- 4 about this particular project that I probably made
- 5 last time, but as we look at all of the renewable
- 6 projects and anticipate those coming online over the
- 7 next few years, projects like Pio Pico, that can
- 8 follow load and can come up to full load within 10
- 9 minutes from a cold start, are the kind of projects
- 10 that we need to provide that firming power to the
- 11 Grid, to enable the renewable projects to serve us in
- 12 the best way, as well. So, we appreciate being back
- 13 before you again and this time we will be back with an
- 14 adequate response, shortly.
- 15 COMMISSIONER WEISENMILLER: I wanted to
- 16 check and see if there was anyone in the audience or
- 17 anyone on the phone who wanted to comment on this
- 18 application. Okay, Commissioners? Any comments or
- 19 questions?
- 20 COMMISSIONER DOUGLAS: Chairman, if you're
- 21 looking for a motion to find the plant at this time
- 22 data inadequate, I'll make that motion.
- 23 COMMISSIONER PETERMAN: I'll second that
- 24 motion.
- 25 COMMISSIONER WEISENMILLER: We have a motion

- 1 and a second. All in favor?
- 2 (Ayes.) This also carries unanimously.
- 3 Thank you.
- 4 Let's turn our attention to Item 4. Meta
- 5 Vista. Possible approval of Purchase Order Number
- 6 P.O. 10-409.00-007 with Meta Vista for \$260,000 to
- 7 provide lead system architectural services for the
- 8 Application Core Technology (ACT) Project. The
- 9 contract will provide the Information Technology
- 10 Services Branch with a vehicle to improve and
- 11 streamline the technical environment and applications
- 12 at Energy Commission consistent with California
- 13 Information Technology Strategic Plan (ERPA funding).
- 14 And we have Atlas Hill. Atlas?
- MR. HILL: Thank you. Good morning,
- 16 Chairman and Commissioners. My name is Atlas Hill and
- 17 I'm the Energy Commission's Assistant IT Manager. I
- 18 am seeking your approval today for an Energy
- 19 Commission Agreement with the company known as Meta
- 20 Vista to providing programming services and
- 21 architectural services in this computer programming
- 22 architectural services. This agreement results from a
- 23 request for an offer made under the Department of
- 24 General Services, California Multiple Awards Schedule.
- 25 The programming services are basically to assist the

- 1 IT staff with development of application standards and
- 2 provide improved efficiency in the development of
- 3 computer code. And also, it will give us what we call
- 4 a service-oriented architecture, which will assist us
- 5 in having an opportunity to actually consolidate
- 6 computer applications. If there are any questions, I
- 7 would be happy to answer them at this time.
- 8 CHAIRMAN WEISENMILLER: Commissioners, any
- 9 questions or comments? Can I have a motion?
- 10 VICE CHAIR BOYD: I will move approval.
- 11 COMMISSIONER DOUGLAS: Second.
- 12 CHAIRMAN WEISENMILLER: All in favor?
- 13 (Ayes.) This also passed unanimously.
- 14 Thank you.
- MR. HILL: Thank you very much.
- 16 CHAIRMAN WEISENMILLER: Item 5. California
- 17 Employment Training Panel. Possible approval of
- 18 Amendment 1 to Contract 600-09-016 with the California
- 19 Employment Training Panel for a one-year time
- 20 extension and adding \$780,000 in funding. This
- 21 amendment will find additional workforce training
- 22 contracts to establish or fund additional workforce
- 23 training contracts established through this
- 24 interagency agreement to deliver training services to
- 25 California's emerging green transportation industry.

- 1 This is ARFVTF funding. And we have Darcie Chapman.
- MS. CHAPMAN: Good morning, Commissioners.
- 3 We're seeking approval of this amendment to the
- 4 Employment Training Panel to meet the ongoing demand
- 5 for workforce training that ETP is experiencing with
- 6 our program, the Alternative and Renewable Fuels and
- 7 Vehicle Technology Program. The Employment Training
- 8 Panel was approved originally in June of last year and
- 9 they got one of their panel meetings in before the
- 10 budget door closed, which was closed as we all well
- 11 know until October. And then, they had another round
- 12 of approvals after they went through their spending
- 13 authority process with Department of Finance, and
- 14 they've approved up to eight contracts, three of which
- 15 are those that were approved in January, and are just
- 16 in the final stages of contract development. Five are
- 17 approved contracts, three are active in training, and
- 18 two have yet to begin training.
- 19 So far, the queue of demand or interest in
- 20 workforce training fund for alternative fuel vehicles
- 21 is standing at they have a queue of \$5.5 million,
- 22 including a recent addition of Tesla, and a reduced or
- 23 return of the California Labor Federation for transit
- 24 agencies to train their folks on their new vehicles
- 25 that have come on line. So, we have currently a

- 1 balance, with approval of this funding to be added to
- 2 the contract, we have remaining funds available in
- 3 that agreement of \$3 million, with a demand of \$5.5
- 4 million. We hope you will approve it.
- 5 CHAIRMAN WEISENMILLER: Thank you.
- 6 Commissioners, any questions or comments?
- 7 VICE CHAIR BOYD: Since this came through
- 8 the Transportation Committee and we reviewed and
- 9 recommend its approval, I intend to make a motion, but
- 10 I'll defer to any comments first if any other
- 11 Commissioners have a comment.
- 12 COMMISSIONER DOUGLAS: Just a brief comment.
- 13 I was pleased to hear of the interest in the program
- 14 and the numbers that you provided in terms of people
- 15 being trained and interest in the program, so it
- 16 sounds like it's going very well and, so, I'm in
- 17 strong support of this item.
- 18 VICE CHAIR BOYD: Mr. Chairman,
- 19 Commissioners, I would just point out that, yes,
- 20 indeed, we did approve this in the Transportation
- 21 Committee, very vigorously approved it, and are strong
- 22 supporters of the goals and objectives of this
- 23 activity. I wanted to point out that this is a very
- 24 popular subject area these days, politically and
- 25 otherwise, and this agency was perhaps one of the

- 1 earliest agencies to recognize the need for employment
- 2 training and development in multiple fields, including
- 3 in the transportation field, and I do recall quite
- 4 some time ago this agency beginning to approve funds
- 5 for training. I do remember Commissioner Douglas and
- 6 I and working on the very first Investment Plan for
- 7 the Alternative Fuels and Alternative Transportation
- 8 Technologies Program, not only approving a significant
- 9 amount of money in that very first Investment Plan for
- 10 training, but actually upping the amount of money
- 11 fairly significantly in recognition of the desperate
- 12 need and the fortunate timing of such activity. So,
- 13 it's with that in mind that I do want to make a motion
- 14 to approve this. I also think we probably ought to
- 15 take a few moments in the very near future to provide
- 16 to us and to others an inventory, or a listing of all
- 17 the employment development and training projects that
- 18 we have undertaken here, just to point out to others
- 19 the significant efforts this agency has made in this
- 20 area, having recognized it early on and having been
- 21 fortunate enough to have a fair amount of money, both
- 22 through the Economic Stimulus Programs and through AB
- 23 118. So, with that, I would move approval of this
- 24 item.
- 25 COMMISSIONER PETERMAN: Vice Chair, I'd just

- 1 like to make a comment before we do the final motion.
- 2 I was also happy to see this on the agenda, especially
- 3 happy to see that there is industry collaboration
- 4 because we are interested in work force training, but
- 5 we also wanted to make sure that there are jobs
- 6 available for these trained workers to go into, and
- 7 industry collaboration at this point suggests that
- 8 they are thinking about this and thinking about the
- 9 opportunities that might emerge along the pipeline.
- 10 VICE CHAIR BOYD: I would say, Mr. Chairman,
- 11 I strongly appreciate the comments of Commissioner
- 12 Peterman on this point. I think we, on several
- 13 occasions, have pointed out the need for some of our
- 14 programs to be continued in these tough financial
- 15 times because they create businesses that will create
- 16 jobs, while a lot of effort is being put into
- 17 workforce training and preparing people for jobs, we
- 18 have to have the jobs, so there is the nexus between a
- 19 lot of what this agency does, both in the outputs from
- 20 its PIER Program, which are longer term, and more
- 21 particularly in the outputs from the AB 118 program,
- 22 where we really are tending to fund the final
- 23 demonstration and deployment of technologies and
- 24 businesses who are ready, willing and anxious to start
- 25 hiring people. So, anyway, I think we have a good

- 1 story to tell and we should continue to tell it
- 2 wherever we can. In any event, thank you.
- 3 COMMISSIONER DOUGLAS: I'll just add,
- 4 Commissioners, that the IEPR Committee recently held a
- 5 workshop on workforce training issues and, in
- 6 particular, the question of what the benefits could be
- 7 to the State of California of partnering with other
- 8 states and the Federal Government to create a national
- 9 workforce training center, and using that as a
- 10 clearinghouse of information, a way of understanding,
- 11 analyzing and approaching information, making
- 12 curriculum and advances in different areas of
- 13 workforce training accessible, more broadly
- 14 accessible, among other things. So, I'm really
- 15 pleased, you know, as we get more experience working
- 16 with our partners such as ETP and EDD in this area,
- 17 and working through the Green Collar Jobs Council, and
- 18 increasingly looking at opportunities of partnering
- 19 with the Federal Government, that there's a longer
- 20 term vision coming out of here, as well as good
- 21 programs that we're implementing right now.
- 22 VICE CHAIR BOYD: I believe you have a
- 23 motion and a second.
- 24 COMMISSIONER PETERMAN: I didn't actually
- 25 second, so I second.

- 1 CHAIRMAN WEISENMILLER: Okay, so all in
- 2 favor?
- 3 (Ayes.) This also carries unanimously.
- 4 Thank you.
- 5 MS. CHAPMAN: Thank you, Commissioners.
- 6 CHAIRMAN WEISENMILLER: Item 6. Delta
- 7 Diablo Sanitation District. Possible approval of
- 8 Contract 500-10-034 for \$999,924 with Delta Diablo
- 9 Sanitation District to develop, demonstrate and
- 10 implement a system or systems for converting biosolids
- 11 to energy that will maximize energy production,
- 12 minimize solid waste and liquid waste disposal issues,
- 13 and meet California's environmental standards. And
- 14 this is PIER Electricity funding. And the contact is
- 15 Rizaldo Aldas.
- MR. ALDAS: Good morning, Commissioners. My
- 17 name is Rizaldo Aldas and I am with the Energy
- 18 Generation Research Office, Public Interest Energy
- 19 Program. This project will demonstrate a technology
- 20 and system for processing and converting biosolids to
- 21 energy. Biosolids is a organic product resulting from
- 22 treatment of domestic sewage and, in the Bay Areas
- 23 along, the estimated production is around 158,000 dry
- 24 metric tons and, now, handling and managing these
- 25 biosolids is a major challenge. The Delta Diablo

- 1 Sanitation District in this project is leading and
- 2 representing the Bay Area Biosolids to Energy
- 3 Coalition. This is a consortium of 16 Bay Area public
- 4 agencies seeking innovative and sustainable solutions
- 5 to the management and use of biosolids and, so, this
- 6 particular project is a major step in achieving the
- 7 Coalition's goal of implementing a regional biosolids
- 8 through energy facility.
- 9 The specific technology that the project
- 10 would like to demonstrate is known as steam carbon
- 11 dioxide reforming, which has yet to be commercially
- 12 demonstrated with biosolids. The technology is
- developed and patented by Intelergy, Inc., the same
- 14 company that is a subcontractor and lead developer for
- 15 this project. The Intelergy process uses elevated
- 16 temperature and calculated quantity of steam carbon
- 17 dioxide to break down biosolids and product hydrogen
- 18 rich gaseous fuel known as syngas. This syngas,
- 19 itself, can be used for energy applications, it can
- 20 also be processed for producing another type of fuel,
- 21 or it can purify hydrogen for energy applications.
- 22 And for this particular project, they would like to
- 23 use the gaseous fuel to run fuel cell to generate
- 24 electricity.
- 25 The demonstration facility will be designed

- 1 for a capacity of up to seven tons per day and will be
- 2 located in Richmond, California. The total project
- 3 cost is around \$4.7 million, so the PIER funding
- 4 request here of \$999,924 represents only 21 percent of
- 5 that total project cost. The remaining 79 percent
- 6 will be provided as match funding for this project.
- 7 I would request your approval of this
- 8 agreement and I am ready to answer any questions you
- 9 may have.
- 10 CHAIRMAN WEISENMILLER: Thank you. Is your
- 11 office going to discuss anything on the CEQA
- 12 questions, Michael? No, okay, thanks. I believe we
- 13 have one member from the audience who would like to
- 14 make a comment. Christine?
- MS. QUINN: Caroline Quinn.
- 16 CHAIRMAN WEISENMILLER: Caroline Quinn.
- 17 Thank you.
- MS. QUINN: Thank you. Good morning,
- 19 Commissioners. I'm Caroline Quinn with Delta Diablo
- 20 Sanitation District. We are the lead agency for the
- 21 Bay Area Biosolids to Energy Coalition, 16 Bay Area
- 22 agencies representing two million customers, and
- 23 working together to develop the biosolids to energy
- 24 solution. Our facilities treat wastewater and produce
- 25 clean water and biosolids on a 24/7 basis.

- 1 Independent studies have shown that there is
- 2 significant energy potential in the wastewater that we
- 3 treat, and we're already tapping some of that energy,
- 4 however, significant energy does remain in the
- 5 biosolids at the end of that process. Technologies
- 6 are being studied and developed to determine how best
- 7 to tap that energy, yet bringing these technologies to
- 8 fruition is sometimes only possible with grants such
- 9 as those in the PIER Program. The PIER Program
- 10 provides a valuable resource to help develop
- 11 progressive approaches to fully tapping our renewable
- 12 energy resources. The work funded by this grant will
- 13 provide valuable information for public agencies
- 14 throughout California. And if the technology is
- 15 successful, it has broader application to other
- 16 feedstocks and it can help address some of the
- 17 challenges that have hampered development of more
- 18 renewable energy projects, air quality issues being
- 19 one of them. In this way, the grant will help move
- 20 clean energy policy forward in California.
- The Energy Commission staff has been a
- 22 pleasure to work with, very professional and very
- 23 responsive. Our 16 agencies very much appreciate your
- 24 consideration of this grant and the opportunity to
- 25 partner with the Energy Commission.

| 1 | CHAIRMAN | WEISENMILLER: | Thank | you. |
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- 2 Commissioners, do you have any questions or comments
- 3 on this?
- 4 VICE CHAIR BOYD: I have no questions. I
- 5 have a comment or two. First, I want to thank Ms.
- 6 Quinn for her presentation, for her pursuit of this
- 7 project, and her compliments to the staff, they're
- 8 rare these days, and so much appreciated, quite
- 9 frankly. I'm very familiar with this project, having
- 10 this project before me today is kind of music to my
- 11 ears, it moves forward -- another example of moving
- 12 forward the issue of using our waste resources for
- 13 valuable energy activities, something that we'll be
- 14 discussing a little bit more later on the agenda when
- 15 we get to the Bioenergy Action Plan. But,
- 16 nonetheless, this has taken some time and many people
- 17 have worked very diligently to bring it to fruition,
- 18 and I think the appreciation for these types of
- 19 projects has grown exponentially during the period of
- 20 time we have worked to bring this project to fruition.
- 21 And so, I think there is now a greater understanding
- 22 of the need for and a greater appreciation for these
- 23 types of projects, and so this was reviewed, of
- 24 course, by the Research Committee, which you and I are
- 25 both members, Mr. Chair, and I would recommend its

- 1 approval as that committee did and move to approve the
- 2 item.
- 3 COMMISSIONER PETERMAN: I would just also
- 4 like to add that I'm impressed by the collaborative
- 5 work that has already happened to date to make this
- 6 project come together, and it's good to see you
- 7 agencies all working together, and I think this is a
- 8 very valuable use of the PIER Research funds. And
- 9 it's nice to see that you're thinking not only about
- 10 environmental ways to dispose of the waste, but ways
- 11 in which to convert it to a positive resource. So,
- 12 thank you.
- 13 CHAIRMAN WEISENMILLER: Do I have a motion
- 14 and a second?
- VICE CHAIR BOYD: You have a motion.
- 16 COMMISSIONER PETERMAN: I second.
- 17 CHAIRMAN WEISENMILLER: All in favor?
- 18 (Ayes.) This also passes unanimously.
- 19 Thank you. Thank you, Ms. Quinn, for coming.
- 20 Item 7. University Of California, Davis.
- 21 Possible approval of Amendment 1 to Contract 500-08-
- 22 053 with the Regents of the University of California,
- 23 Davis, to add \$311,481 and a ten-month time extension.
- 24 The amendment will eliminate three projects and re-
- 25 scope four subtasks based on feedback from the Program

- 1 Advisory Committee. This amendment will also correct
- 2 typographical errors in the budget. Pier contract
- 3 funding. Dustin Davis. Dustin?
- 4 MR. DAVIS: Good morning, Commissioners.
- 5 I'm Dustin Davis from the PIER Buildings Team. This
- 6 agenda item seeks your approval to amend Contract 500-
- 7 08-053 to do the following changes: first, look to
- 8 extend the contract term by 10 months to March 29<sup>th</sup>,
- 9 2013, and add two projects, the first project being we
- 10 are looking to develop and demonstrate Smart Corridor
- 11 lighting systems for commercial and industrial
- 12 buildings. The California Lighting Technology Center
- 13 conducted a survey of lighting energy use across the
- 14 U.C. Davis campus and, surprisingly, the survey found
- 15 corridors to be the largest lighting energy consumer
- 16 on campus, consuming almost 30 percent of total
- 17 lighting in use.
- 18 CLTC will conduct research to develop in
- 19 partnership with manufacturers various demand
- 20 sensitive designs, lighting controls, and control
- 21 algorithms for corridors that will significantly
- 22 reduce energy use while maintaining, if not increasing
- 23 occupant satisfaction. This Smart Corridor Lighting
- 24 System will be demonstrated and evaluated for
- 25 technical and economic feasibility in multiple

- 1 investor-owned utility service territories. Total
- 2 project cost to PIER is \$301,939. This project has an
- 3 additional \$155,000 in match funds from California's
- 4 major IOUs, and the expected duration is 18 months.
- 5 Secondly, we look to add a project that will
- 6 develop a methodology and implementation plan for
- 7 determination of the 2007 California Lighting
- 8 Baseline. The California Energy Commission has been
- 9 tasked by AB 1109, also known as the Huffman Bill, to
- 10 reduce consumption of electricity for lighting uses by
- 11 50 percent from 2007 levels, from 2007 lighting levels
- 12 by 2018. These 2007 lighting levels or baseline is
- 13 currently unknown. This project will not establish
- 14 the baseline, but is the preliminary work required to
- 15 assess and outline the effort needed to construct that
- 16 lighting baseline. Once determined, this baseline
- 17 will be used to identify opportunities in the state to
- 18 support the development of building efficiency
- 19 standards and track progress in meeting the goals of
- 20 AB 1109. Total cost of this initial work is \$61,481,
- 21 and it will take nine months.
- 22 Also, based on recommendations from the
- 23 Program Advisory Committee on this contract that was
- 24 held in the fall of 2010, this amendment is proposing
- 25 to eliminate three projects, redistribute funds of

- 1 projects, and refine the scope of a few other
- 2 projects.
- 3 Lastly, this amendment will correct the
- 4 fringe and general and administrative rates which
- 5 reflect only a minor typographical error in Attachment
- 6 before the budget. With that, I can answer any
- 7 questions you guys have. Thank you.
- 8 CHAIRMAN WEISENMILLER: Commissioners, any
- 9 questions or comments?
- 10 VICE CHAIR BOYD: I have no questions, and
- 11 I'll just comment that this subject, of course, was
- 12 discussed in the R&D Committee at length to get a
- 13 comprehensive understanding of what was proposed here,
- 14 and the Committee thus approved and recommended that
- 15 this item be placed on this agenda and presented to
- 16 all of us for approval, and thus I would move its
- 17 approval as noted. There are some interesting
- 18 findings as a result of the work that's been done and
- 19 we felt that the staff was recommending the
- 20 appropriate changes to the program and additional
- 21 funding in areas where there appeared to be a very
- 22 significant payback, payoff for the activities
- 23 undertaken. So, on that basis, the R&D Committee
- 24 recommends its approval, and I'll move its approval.
- 25 COMMISSIONER DOUGLAS: I second that.

- 1 CHAIRMAN WEISENMILER: Okay, we have a
- 2 motion and it's been seconded. All in favor?
- 3 (Ayes.) This also passes unanimously.
- 4 Thank you.
- 5 MR. DAVIS: Thank you.
- 6 CHAIRMAN WEISENMILLER: Our next item on the
- 7 agenda will be Item 9. Linde LLC. Possible approval
- 8 of Agreement ARV-10-038, for a grant of \$3,396,209 to
- 9 Linde LLC to install two publicly-accessible hydrogen
- 10 fueling stations at existing retail gasoline stations.
- 11 This is also ARFVTF funding. And Tobias?
- MR. MUENCH: Yes. Good morning, Chairman,
- 13 good morning, Commissioners. This is Tobias Muench,
- 14 Hydrogen Fuel Lead of the Emerging Fuels Office,
- 15 presenting to you this morning a project that proposes
- 16 to close a grant agreement with Linde for building two
- 17 new hydrogen fueling stations, added to existing
- 18 gasoline stations, one in West Sacramento and one in
- 19 Laguna Niguel. This is funding from the ARFVTP,
- 20 Alternative and Renewable Fuels and Vehicle Technology
- 21 Program, from the '09-'10 funding year. This is a
- 22 project coming out of the first solicitation for a
- 23 hydrogen fueling station infrastructure. It is from
- 24 PON 09-068. These two stations would provide 240
- 25 kilograms of daily capacity of hydrogen to fuel fuel

- 1 cell vehicles. This is enough to fuel up to 240
- 2 vehicles per day, approximately one in 1,200 vehicles
- 3 are expected to be deployed in Southern California,
- 4 and about 200 vehicles in the Bay Area in the next
- 5 three years; these are numbers from an OEM Automaker
- 6 Survey that we conducted.
- 7 The lack of infrastructure for hydrogen has
- 8 been a major hurdle in promoting fuel cell vehicle
- 9 deployment and the formerly large footprint and high
- 10 station costs were also hurdles. Linde has been
- 11 overcoming a lot of this with a modular approach. The
- 12 hydrogen is being produced centrally, liquefied, and
- 13 then trucked to the stations where it is being
- 14 vaporized on demand. That leads to a relatively small
- 15 footprint and the cost has also been reduced.
- This project would spend \$3,396,209 of
- 17 ARFVTP funds from CEC, and Linde match funding would
- 18 be \$1,110,721. Benefits, the project would help build
- 19 a hydrogen fueling network to enable automakers to
- 20 accelerate their deployment of fuel cell vehicles in
- 21 California in both Southern California and the Bay
- 22 Area. Fuel cell vehicles provide a zero tailpipe
- 23 emissions option, a 44 percent greenhouse gas
- 24 lifecycle reduction over conventional gasoline
- 25 vehicles. The greenhouse gas emission reductions from

- 1 this project throughout its three-year life would be
- 2 1,933 metric tons of greenhouse gases reduced, and
- 3 357,375 gasoline gallons displaced. It also would
- 4 create 57 jobs in the state. That was my information.
- 5 I believe we have Linde's Steve Eckhardt on the phone,
- 6 who would like to say a few words to the project.
- 7 Steve, are you there?
- 8 MR. ECKHARDT: Yes, I'm talking and I'm not
- 9 sure I'm connected.
- 10 MR. MUENCH: We can hear you. Go ahead.
- 11 MR. ECKHARDT: Okay, thank you. Thanks for
- 12 the opportunity to talk on behalf of Linde. We'd just
- 13 like to say that we very much appreciate the support
- 14 of the Energy Commission, both generally and in
- 15 considering hydrogen fueling infrastructure as part of
- 16 AB 118 funding, even more specifically in considering
- 17 Linde's proposal, and the business approach and the
- 18 technology approach that we're taking toward this
- 19 market. The funding is critical to develop a
- 20 commercial and public fueling infrastructure, to allow
- 21 the car companies to deploy fuel cell vehicles over
- 22 the coming years, and then maybe, more importantly, to
- 23 give drivers confidence that they can drive these
- 24 vehicles, knowing that there is adequate coverage in
- 25 terms of fueling infrastructure, as well as fueling

- 1 infrastructure that is high performance and will allow
- 2 them to fuel, very similarly to the way they fuel
- 3 today with conventional fuels, very quickly and very
- 4 reliably and very safely.
- 5 At each of these two sites, Linde will be
- 6 supplying a hydrogen fueling station, it will consist
- 7 of liquid hydrogen storage, hydrogen compression, and
- 8 hydrogen dispensing. This technology will fuel any
- 9 car with 7 kilograms of hydrogen in three minutes,
- 10 which will allow that car to go very long distances
- 11 which, of course, is one of the great benefits of the
- 12 fuel cell vehicle technology.
- We believe these projects, these two sites
- 14 and these two projects, are very important in a couple
- 15 of respects, first, it's proving out that we can do
- 16 very high through-put fueling and high performance
- 17 fueling at a station. As Tobias mentioned, these are
- 18 very high through-put stations and they are stations
- 19 that are designed to be able to fuel cars very
- 20 quickly, giving fuel cell vehicle drivers the
- 21 convenience that they will demand. And, secondly, we
- 22 think this is important because what this is, this is
- 23 Linde stepping up as a fuel provider, owning and
- 24 operating these stations. We have evaluated this
- 25 market very carefully and we are confident that, when

- 1 the vehicles come out, that we can prove out this
- 2 business model and that we can make these types of
- 3 stations economically viable in the future.
- 4 So, again, we'd just like to reiterate our
- 5 appreciation to the CEC for evaluating and potentially
- 6 approving this proposal. This builds on a
- 7 relationship that we've enjoyed with the Energy
- 8 Commission, with our landfill gas LNG plants that we
- 9 have worked on with Waste Management, and we're
- 10 looking forward very much to working with the Energy
- 11 Commission on our hydrogen stations, going forward.
- 12 So, again, thank you very much for consideration this.
- 13 CHAIRMAN WEISENMILLER: Thank you for your
- 14 comments. Kristin?
- MS. DRISCOLL: Thank you, Mr. Chair. This
- 16 is Kristin Driscoll from the Energy Commission's Chief
- 17 Counsel's Office. We review all of the projects
- 18 proposed under AB 118 to determine the level of review
- 19 necessary under the California Environmental Quality
- 20 Act. Based on my review of this project and further
- 21 due diligence, I recommend that the Commission include
- 22 a finding that the project is categorically exempt
- 23 from further environmental review.
- 24 CHAIRMAN WEISENMILLER: Thank you. Any
- 25 questions or comments?

| 1 COMMISSONER PETERM | AN: I have tw | o questions, |
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- 2 first, both related. My first question is why is the
- 3 projected demand for Northern California vehicles so
- 4 significantly less than Southern California? And I'll
- 5 let you answer that one first.
- 6 MR. MUENCH: The approach that we've taken
- 7 for infrastructure planning for hydrogen goes back to
- 8 recommendations from UC Irvine and UC Davis, both
- 9 universities have been our primary source for planning
- 10 studies for hydrogen infrastructure, and them and
- 11 other stakeholders have for a long time recommended a
- 12 cluster approach, and the original four clusters where
- 13 stations and vehicles are slated or supposed to be
- 14 deployed first, are in Southern California. There are
- 15 four clusters in California, one is called the Santa
- 16 Monica, then there is the Torrance cluster, and then
- 17 there are two clusters in Orange County, Newport Beach
- 18 and Irvine. And those are the early adopter regions
- 19 where vehicles are going to be deployed, OEMs are in
- 20 line for deploying vehicles in those areas first, and
- 21 then stations, as well. And then we extended that to
- 22 two clusters in Northern California, the Bay Area and
- 23 here in Sacramento. But those are kind of in the
- 24 beginning weaker areas, so the concentration is in
- 25 Southern California.

| 1 VICE | CHAIR | BOYD: | I | want | to | add | to | what |
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- 2 Tobias has said to indicate that this is driven not by
- 3 us or University studies, this is driven by the
- 4 manufacturers of the vehicles, and they're the point
- 5 of the sphere, they're indicating where it is their
- 6 intent to roll out vehicles for demonstration
- 7 purposes, and the areas are areas they have chosen for
- 8 their own market reasons, and their decisions with
- 9 regard and it's kind of a large consensus of
- 10 decisions amongst many people, including the input
- 11 from the California Fuel Cell Partnership, which has
- 12 been around for quite some time. But they more or
- 13 less indicate where they anticipate the demonstrations
- 14 would be best for them, and then everything that
- 15 follows is predicated upon those decisions, the
- 16 studies by the Universities for us with regard to
- 17 what's the best kind of network you can have, as
- 18 Tobias has indicated, it all follows from that point.
- 19 But just to make sure the record is clear, it's not us
- 20 dictating where the cars are going, it's the folks who
- 21 have now pretty strongly indicated, yes, they're
- 22 really going to make these vehicles, and they're
- 23 really to want to demonstrate them through deploying
- 24 that that's the beginning of the process of where
- 25 eventually investments are made, and where we put our

- 1 relatively significant, but still not majority share,
- 2 of dollars for the fueling infrastructure. And we
- 3 will go, have been going, and will go through your
- 4 term of office, the chicken and the egg question,
- 5 always, as to stations inducing cars, cars inducing
- 6 stations, who should pay what? And this project, as I
- 7 was going to say later on, is the product of a very
- 8 long series of discussions about these questions and
- 9 this is the final fruition. It's long because it's
- 10 complicated, it's long because it's tough doing
- 11 business with the State, it's long because, in these
- 12 times of limited staff resources and budget resources,
- 13 even more difficult doing business with the State.
- 14 So, this is a significant event today that this is
- 15 happening and is also a product of the efforts of the
- 16 advisory committee that I referenced earlier, that has
- 17 been in existence with the AB 118 program. One of the
- 18 more contentious and oft discussed and most discussed
- 19 areas in terms of where we invest money has always
- 20 been the hydrogen infrastructure. Sorry, Tobias, I
- 21 took a lot of your nickel there.
- 22 COMMISSIONER PETERMAN: Thank you, Tobias
- 23 and Commissioner Boyd. That was very useful. So, I
- 24 think it would be incorrect to assume that, although
- 25 we're sizing the fueling stations to be the same size

| 1 | in the | Northern | and | Southern | California | Regions. | . we're |
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- 2 expecting Northern California over time for demand to
- 3 grow and that this station would have excess capacity
- 4 that would meet the demand expected in the next -
- 5 MR. MUENCH: Correct. We actually put a
- 6 minimum requirement into our solicitation that the
- 7 stations would have to have at least 100 kilograms of
- 8 capacity. All of them came out much higher 180 to
- 9 240, and the other note I would like to make is, in
- 10 the solicitation, we actually made sure that the
- 11 proposers had to tie in specific geographically
- 12 located vehicle deployments with the location of the
- 13 station, so that supply and demand would be matched.
- 14 So, they had to prove that in their Letters of
- 15 Commitment, which they all did.
- 16 COMMISSIONER PETERMAN: Thank you. Good to
- 17 see some movement in this area.
- 18 COMMISSIONER DOUGLAS: I just can't resist.
- 19 This discussion is bringing back to me the long hours
- 20 of discussion of that issue when I was privileged to
- 21 be on the Transportation Committee, and the discussion
- 22 about trying to match the vehicle roll-out with
- 23 stations and the need for a critical mass of stations
- 24 to make hydrogen a viable option for people who might
- 25 choose to buy a car, or to demonstrate a car, and this

- 1 incredible balancing act of trying to work with the
- 2 manufacturers and work with early adopters, and
- 3 ascertain demand and actually make hydrogen a viable
- 4 option for, say, residential customers, as opposed to
- 5 fleets, which is a different approach entirely. So,
- 6 I'm pleased to see these move forward, I think it's an
- 7 important effort. I'm looking forward to seeing more
- 8 and more people driving hydrogen cars in our key
- 9 clusters.
- 10 VICE CHAIR BOYD: I'll reiterate my motion
- 11 to approve.
- 12 COMMISSIONER DOUGLAS: Second.
- 13 CHAIRMAN WEISENMILLER: All in favor?
- 14 (Ayes.) This also passes unanimously.
- 15 Thank you, Tobias.
- MR. MUENCH: Thank you.
- 17 MR. LEVY: Chairman Weisenmiller, pardon me
- 18 for interrupting. We should make a note for the
- 19 record that Item 8 was pulled and will be heard on the
- 20 April 6<sup>th</sup> agenda.
- 21 CHAIRMAN WEISENMILLER: Right, I was also
- 22 going to make that motion, I did realize that, and at
- 23 the same time we should probably note that Item 11 has
- 24 also been pulled, it will be heard later. So, the
- 25 only item we have left is Item 10.

| 1 | Item 10. | 2011 | Bioenergy | Action | Plan. |
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- 2 Possible adoption of the Draft 2011 Bioenergy Action
- 3 Plan. This version updates the 2006 Bioenergy Action
- 4 Plan to address continuing barriers to the development
- 5 and deployment of bioenergy, and to identify issues
- 6 and solutions to biogas injection and gas cleanup.
- 7 Staff.
- 8 MR. NUFFER: Good morning, Chair,
- 9 Commissioners. My name is John Nuffer. I manage the
- 10 Integrated Energy and Climate Change Unit in the
- 11 Renewable Energy Office. With me is Garry O'Neill, he
- 12 is the principal author, editor, and coordinator for
- 13 the Bioenergy Action Plan, and this has been his life
- 14 for the last 12 years. So, we're grateful today to
- 15 ask you to consider adopting it.
- 16 As background, California's first Bioenergy
- 17 Action Plan was published in 2006. That first plan
- 18 was developed in response to Governor Schwarzenegger's
- 19 Executive Order that set goals for the generation of
- 20 electricity and the production of fuels from biomass.
- 21 The Executive Order requires the biomass to generate
- 22 20 percent of our renewable electricity and product 40
- 23 percent of our bio-base transportation fuels in-state.
- 24 We have made some progress toward these goals, but not
- 25 enough. There are still challenges facing those who

- 1 want to permit build, or operate bioenergy facilities.
- 2 That's why the 2009 Integrated Energy Policy Report
- 3 included a recommendation to update the 2006 Plan.
- 4 The 2011 Plan identifies current
- 5 opportunities and continuing challenges to bioenergy
- 6 development. More importantly, it identifies actions
- 7 the State agencies will be taking over the next two
- 8 years and beyond to address those challenges, so the
- 9 developers can build the facilities needed to meet the
- 10 State's long-term bioenergy goals.
- 11 Staff drafted the plan in collaboration with
- 12 nine other State agencies from the Bioenergy
- 13 Interagency Working Group, with assistance from the
- 14 California Biomass Collaborative at U.C. Davis.
- 15 Commissioner Boyd has graciously and patiently, I
- 16 might add, Chaired the Working Group for the past
- 17 eight years. The Bioenergy Interagency Working Group
- 18 includes the agencies you see on the cover of the
- 19 plan. These include the PUC, Cal Recycle, Cal Fire,
- 20 the Water Board, the Air Board, and others.
- 21 We also worked closely with staff from PIER
- 22 and the Fuels and Transportation Division, and we're
- 23 grateful for their assistance.
- 24 Stakeholders were given an opportunity to
- 25 participate in the process at two public workshops

- 1 held here at the Energy Commission, one last June, and
- 2 one last December. The first workshop was to solicit
- 3 comments about challenges to bioenergy development;
- 4 the second was to discuss potential State agency
- 5 actions to address those challenges. We involved
- 6 IOIUs, POUs, consulting firms, developers,
- 7 environmental groups, industry associations, and the
- 8 public, and we discussed biopower, biofuels, and
- 9 biogas. We received numerous comments and suggestions
- 10 at those workshops, which helped us write the
- 11 document. In addition, we received and incorporated
- 12 many ideas, suggestions, comments, and actual language
- 13 from numerous stakeholders and others, many times this
- 14 past year that we've incorporated into the document.
- 15 As we thought about what should be in the
- 16 plan and how it should be organized, we developed
- 17 objectives, considering what could or should be done
- 18 over the next couple of years to make the most
- 19 meaningful progress towards the State's bioenergy
- 20 goals, and in the most cost-effective manner. These
- 21 five objectives are to increase bioenergy production
- 22 at existing facilities, to promote and expedite the
- 23 construction of new facilities, to promote and
- 24 encourage the integration of bioenergy facilities, to
- 25 fund research and development, and to remove statutory

- 1 barriers, and to streamline the regulatory process.
- 2 We focused on actions in the near term to support
- 3 continuation of existing biopower and biofuel
- 4 facilities, which is more effective than building new
- 5 plants. We certainly need to expedite the permitting
- 6 and construction of new plants, but we can't afford to
- 7 lose existing plants which represent almost 1,400
- 8 megawatts of renewable baseload electricity and over
- 9 200 million gallons per year of biofuel capacity, as
- 10 well as thousands of jobs.
- 11 Given these objectives, we next discussed in
- 12 the plan the continuing challenges faced by operators
- 13 and developers of bioenergy facilities, which fall
- 14 into five general categories: the uncertainty in
- 15 siting and permitting of facilities, the cost of
- 16 collecting, processing, and transporting sustainably
- 17 harvested feedstock, the competition with fossil
- 18 fuels, and difficulty in obtaining project financing,
- 19 the need for research and development, and restrictive
- 20 statutes and regulations. For each of these
- 21 challenges, we list actions that agencies will be
- 22 taking by December 2012, using existing resources, to
- 23 meaningfully increase bioenergy development.
- If you choose to adopt the plan today, we
- 25 would be implementing it immediately. We would hold

- 1 quarterly meetings of the bioenergy interagency
- 2 working group, we would begin implementing actions
- 3 that have been designated for the Energy Commission,
- 4 and we would monitor the progress of other agencies
- 5 and develop ways to measure progress towards the
- 6 State's overall bioenergy goals. We would update the
- 7 plan as conditions change, and we would report to the
- 8 Legislature through the IEPR every two years.
- 9 In conclusion, if the State is to be
- 10 successful at meeting its bioenergy goals, we will
- 11 need to double our generation of biopower by 2020.
- 12 And we will also need to increase our in-State biofuel
- 13 production by six times, and those are daunting
- 14 challenges. The 2011 plan identifies the sources that
- 15 could generate some, if not all, of this bioenergy
- 16 from solid fuel biomass such as agricultural waste, to
- 17 landfill gas, to urban derived biomass. We believe
- 18 that the 2011 Bioenergy Action Plan is a good start
- 19 and supports the Governor's Division in his Clean
- 20 Energy Jobs Plan. It supports cost-effective on-site
- 21 and small scale power production, clearer permitting
- 22 processes, and the creation of new and sustainable
- 23 jobs. With that, Garry and I would be happy to answer
- 24 any questions.
- 25 CHAIRMAN WEISENMILLER: Okay. I think we

- 1 have two members of the public who are here to speak
- 2 today. The first is Michael Theroux from JDMT.
- 3 MR. THEROUX: Good morning, Commissioners,
- 4 and thank you for the chance to say a word or two.
- 5 And I will keep it brief. First, I'd like to thank
- 6 the Commission, the staff in particular, for the long
- 7 hours on this and the diligence in working with all
- 8 the rest of the agencies involved, as well as with the
- 9 stakeholders in the public sector. A lot has been
- 10 improved on as we've developed this particular plan
- 11 during the course of its work, and I have submitted
- 12 comments on a few of those areas that I wanted to call
- 13 out as specific improvements.
- 14 Biomass is an easy word to say and a hard
- 15 word to define. It covers a lot of territory. Each
- 16 of those areas or territory, each of those types of
- 17 biomass, has its own flavor of regulations and
- 18 technology and marketplace, and we're moving into a
- 19 closer understanding of how to match that up; it's an
- 20 ongoing process, the plan opens the door for that, I'm
- 21 looking forward to that being an area of
- 22 implementation in the future.
- The largest area that I see a need for is,
- 24 indeed, not the physical plants themselves, but the
- 25 infrastructure to move the materials from where they

- 1 are to those plants. Unfortunately, our big biopower
- 2 plants were build on the idea of build it and they
- 3 will come and bring the fuel to us, and we all know
- 4 that isn't true now. So, as we move forward, this
- 5 plan calls for a greater amount of emphasis on supply
- 6 chain development and understanding. That's a
- 7 multiple facility, multiple stakeholder process that
- 8 needs to be constructed because much of it simply does
- 9 not exist as we've heard in the biosolids and some of
- 10 the other presentations today. So, I'm looking
- 11 forward to engaging staff and the other agencies in
- 12 consideration of what an infrastructure actually looks
- 13 like, for such a diverse thing as biomass and all the
- 14 tools that we have to bring to bear upon that.
- This plan is indeed an outline. Without
- 16 direct implementation, it remains an outline. I know
- 17 that staff is committed to taking the next steps in
- 18 moving forward, there are pieces of interaction with
- 19 all agencies, as well, in particular, with industry,
- 20 that need to be attended to, in my opinion have not
- 21 been the focus in the past. It is difficult to even
- 22 ask the questions of industry and get a straight
- 23 response in terms of what's missing, other than the
- 24 common statements of "it's tough," and "there's too
- 25 many pieces, "well, exactly what are we talking about?

- 1 And we need to have gloves off discussions with
- 2 representatives of industry that can do these things
- 3 that our objectives call for. And that element takes
- 4 work. At the same time, I understand that there's a
- 5 lot being asked of the agencies in this working group
- 6 and that the representatives in the working group,
- 7 itself, do not necessarily pull the weight to show
- 8 full approval of the commitments that they have
- 9 suggested their agencies might be able to make. So,
- 10 I'm asking that perhaps a more formal approach to
- 11 commitments from those agencies be pursued because
- 12 it's going to take budget assessments and resource
- 13 assessments in each of those agencies. It's good to
- 14 say that they're going to do that, but without a
- 15 budget line item and dedication of resources, the
- 16 likelihood is that all it will be is more discussion
- 17 on the same, and I'd like to get past that.
- 18 I'm personally committed to helping wherever
- 19 I can, as most of the staff know at this point, the
- 20 Commissioners know. I thank you again for your time
- 21 on this, and I see it is a very critical undertaking
- 22 and one that doesn't stop because we approve the
- 23 plans; this is, however, an excellent step forward.
- 24 Thank you.
- 25 CHAIRMAN WEISENMILLER: Thank you. Let's

- 1 turn to John Menke. As you move forward, would you
- 2 also clarify this? On the card, it says you're
- 3 representing State Water Board staff and also that
- 4 you're representing yourself. Who are you
- 5 representing?
- 6 MR. MENKE: I'm making these comments as a
- 7 participant in the Bioenergy Interagency Working Group
- 8 and these are my personal observations, they have not
- 9 been discussed with the Water Board, the Water Board
- 10 is not considered in this 2011 Plan, and developed any
- 11 comments on it. So, these are my comments resulting
- 12 from my participation in that working group.
- 13 CHAIRMAN WEISENMILLER: Okay, thank you.
- 14 MR. MENKE: And I would like to clarify, my
- 15 name is John Menke, I am a staff Environmental
- 16 Scientist at the State Water Board. And since October
- 17 of 2005, I have been a participant on the Bioenergy
- 18 Interagency Working Group, and in that capacity, I've
- 19 been involved in the development and implementation of
- 20 the 2006 Action Plan, and also the update to that plan
- 21 that is the 2011 Draft Plan that you're currently
- 22 considering today.
- 23 The reason I'm here is because I do have
- 24 concerns that the action items in the 2011 plan will
- 25 not result in the gains we need in bioenergy and

- 1 biofuels. Those goals were established by Governor
- 2 Schwarzenegger's 2006 Executive Order and that set
- 3 goals for the 2020 period, a 14-year span. We since
- 4 had five of those years pass and we have achieved
- 5 essentially no gain in bioenergy and biofuels relative
- 6 to 2006, when he issued that Executive Order.
- 7 I have provided two documents that should be
- 8 in your packets, one is a single page, double-sided
- 9 version of this presentation to you, in case I run out
- 10 of time or forget something, the other is a summary of
- 11 the action items from both the 2006 and the 2011
- 12 Action Plans, and that is the focus of my concerns.
- 13 When I look at those action items, I do not see a
- 14 resulting gain in the production of bioenergy or
- 15 biofuels. I'm not saying they're not positive steps,
- 16 but I'm looking for that specific gain and I'm not
- 17 seeing it. And I've asked other participants in the
- 18 working group, I've asked CEC staff, if they could
- 19 help me see where those gains are, and I've not
- 20 received anything that changes my position. So
- 21 that's what I'm trying to bring to your attention. If
- 22 you would look at those yourselves, and share them
- 23 with other people, maybe we can get improvements by
- 24 updating the current plan, the 2011 plan, or in a
- 25 revised version that will come out after 2012, when

- 1 the current plan terminates. So, I'm looking at
- 2 improvements in the future.
- 3 One of the issues I have with the current
- 4 Action Plan is a lack of accountability that's
- 5 predominant throughout that Plan. They identify
- 6 agencies that are participating, but they do not
- 7 identify any staff who are responsible for meeting
- 8 those agency commitments. It's kind of similar to the
- 9 question you asked me am I here for myself, or am I
- 10 here on behalf of the Water Board? And I'm saying I
- 11 can only speak for myself. Well, likewise, in the
- 12 meetings, I can't commit the Water Board to act, I
- 13 can't commit their resources, I can't commit their
- 14 finances, because that's not my role. We need to
- 15 improve the participation in the work group that is
- 16 more representative of the agencies and their
- 17 resources, so we can get commitment to meeting the
- 18 goals the Governor has set in the Action Plan, the
- 19 former Governor.
- One of the problems in my group, and I think
- 21 in the working group, in general, is there is
- 22 turnover. The people that were there originally have
- 23 been replaced, they're retiring, Jim, I believe, is
- 24 retiring this year, I'm retiring this year, the new
- 25 people have got to be brought up to speed and

- 1 involved, and it's just not happening.
- I also want to point out that the action
- 3 plan was developed by technical staff, I participated,
- 4 but we lack business management expertise in
- 5 developing the plan. When Ford Motor Company
- 6 developed their plan for digging out of the hole they
- 7 were in, they didn't turn to people on the assembly
- 8 lines, they went to Managers who had the necessary
- 9 expertise to develop a plan, and I think this plan is
- 10 on that level of development, we need major
- 11 involvement of people who know how to write these
- 12 kinds of plans, get them implemented, and get the
- 13 appropriate action identified and achieve those action
- 14 items.
- I do want to also point out that sometimes
- 16 we are slow to implement agreed upon goals. Back in
- 17 September of 2008, in the working group, we agreed it
- 18 would really be desirable to have a website that we
- 19 could list the bioenergy and biofuel projects that are
- 20 in development, we could identify deficiencies in
- 21 permitting programs, conflicts, how those are
- 22 resolved. And two and a half years ago have gone by
- 23 and we're still talking about doing that, it's a good
- 24 idea, and a website should not be that difficult to
- 25 get up and running. So, again, I think we need to

- 1 improve our way of actually implementing our agreed
- 2 upon action items.
- 3 One final thing I do want to read not
- 4 quite final a statement that came in an e-mail from
- 5 an industry representative, a Bioenergy industry
- 6 representative. This is a person who has talked to
- 7 other people in the Bioenergy field, this went to some
- 8 of the participants in the work group, went to CEC,
- 9 staff, and it went to Legislators, too, and that
- 10 statement says: "Discussions with energy company staff
- 11 indicate that the head of their company group does not
- 12 believe California will actively support actual
- 13 bioenergy development, that California's disparate
- 14 practices are overbearing and unwieldy, the Energy
- 15 Commission staff were certain they could meet the
- 16 environmental specifications to provide economical
- 17 project, but see California as vetting an approval
- 18 process as too complex, self-contradictory, and time-
- 19 consuming. Front-end costs and finance risk are
- 20 unacceptable given uncertainty regarding ability to
- 21 secure permits and certification." Now, that was in
- 22 an email a few weeks ago, I haven't seen a response
- 23 from anybody, I don't know what's happening with that,
- 24 but those are the kinds of statements that we continue
- 25 to see and I would like to see a better way of us

- 1 responding to those as a work group and as people
- 2 concerned about meeting these bioenergy goals.
- 3 The final thing I do want to state is that I
- 4 have not I'm not coming out in opposition of the
- 5 plan, I'm really pointing out some deficiencies in the
- 6 plan, and I certainly am not criticizing the Energy
- 7 Commission staff that I have worked with, John Nuffer
- 8 and Garry O'Neill have been very open with me, they've
- 9 discussed my concerns, they've tried to incorporate
- 10 them into the Action Plans, and I think that it's an
- 11 improved plan, but it still does not demonstrate that
- 12 California can achieve the energy goals that have been
- 13 established for us. Thank you.
- 14 CHAIRMAN WEISENMILLER: Thank you.
- 15 Commissioners, any questions or comments?
- VICE CHAIR BOYD: I'll have a general
- 17 comment at the sum-up, but I'll just thank Mr. [pause]
- 18 -- Menke, excuse me, John, I've known you for years,
- 19 maybe we both need to retire thank him for his
- 20 participation and his comments. I will say that I
- 21 share in a sense some of his concerns, but I'll make a
- 22 statement about this plan since it's got a long
- 23 history, and what have you, that hopefully will
- 24 address some of the concerns and tell you all about
- 25 some of the plans we have in the future.

| 1 | I | would | just | say | that | the | last | couple | of |
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- 2 years, as all of you know, have been very tough years
- 3 on every State agency and, as I referenced earlier,
- 4 we're doing more with less. And things fall into a
- 5 certain queue and a certain perspective, and we deal
- 6 daily with criticisms and concerns about why things
- 7 aren't coming out the other end of the queue with
- 8 regard to this, that, and the other, and I'm afraid
- 9 this project in multiple State agencies is likely
- 10 caught in that concern. I would also say that the
- 11 invitation to each agency head for representatives to
- 12 participate in this process some time ago did indicate
- 13 that -- the invitation was to each agency head to
- 14 participate in this; of course, like all of us, that
- 15 gets delegated to staff who, by the invitation, the
- 16 agency heads were asked to send people who could speak
- 17 for them, and who can commit them because the
- 18 expectation at the end of this process is that each
- 19 agency would ultimately do as we're doing, hopefully
- 20 today, and we being the point of the sphere because
- 21 the locust of activity was placed here in terms of
- 22 heading up this coordination effort, is to in effect
- 23 ratify the plan, and I intend to go to the head of
- 24 each agency and, let's face it, you know, we're going
- 25 through the traditional loop you go through when

- 1 you've just had a change of administrations and we
- 2 don't even have all the heads of agencies in place
- 3 yet. And when we do, they will be visited and called
- 4 upon to hopefully enact this plan. I have discussed
- 5 this plan with some of the new folks, agency
- 6 secretary's, what have you, I have discussed it in the
- 7 Governor's Office, they're very cognizant of what the
- 8 past was and what the present is. And, as soon as we
- 9 all take care of a few other urgent matters, like
- 10 sustaining State Government at all, with a budget and
- 11 what have you, I think we'll get more attention paid
- 12 to this. And I would also say that I appreciate the
- 13 actions of the last Governor, who recreated this
- 14 working group, who asked for the Action Plan, who then
- 15 issued an Executive Order to fulfill that Action Plan,
- 16 and we did what we could, but I'll quite candidly say,
- 17 we were somewhat dwarfed, or had to operate in the
- 18 shadows of the overall binding Action Plan for Climate
- 19 Change and it was hard to find a lot of priorities
- 20 left for this subject, and I think all the agencies,
- 21 John's included, moved forward and took a lot of
- 22 actions that tried to address what we can. Enough
- 23 said. When we're done with any of the testimony, I
- 24 have some other comments I'd like to make, but thank
- 25 you, John, for your participation. Like I say, I

- 1 share your concerns, your frustration, I think more of
- 2 us have a slightly different view on the way we need
- 3 to do this and perhaps a better view of the
- 4 difficulties that many programs that are very
- 5 admirable and almost bordering on altruistic face in
- 6 Government in these times when Government is so
- 7 restricted in its staffing and its funding. Anyway, I
- 8 said I wasn't going to answer him and I did. I have
- 9 more to say when it's appropriate, any other
- 10 questions, perhaps.
- 11 COMMISSIONER DOUGLAS: A brief comment. I
- 12 asked for a briefing on this item in part out of my
- 13 own interest and in part because, in my three years on
- 14 the Commission, Commissioner Boyd has brought up the
- 15 Bioenergy Action Plan, to me, almost more than any
- 16 other topic, and so it increased my curiosity, so I'd
- 17 like to thank staff for the briefing and thank
- 18 Commissioner Boyd for his leadership and really
- 19 tireless and unswerving dedication on this topic, in
- 20 particular, because, as I said, I don't think there's
- 21 a year or even maybe a month that I've been on the
- 22 Commission that I haven't heard him say something
- 23 about the Bioenergy Action Plan.
- 24 COMMISSIONER PETERMAN: Similarly, I also
- 25 got a briefing on this issue from staff and I

- 1 appreciate that, and what I learned in my briefing is
- 2 that staff has been very thoughtful in thinking
- 3 through these issues, and not everything that was
- 4 thought through by the group is in the plan, and I
- 5 look forward to seeing where this goes, and also thank
- 6 Mr. Menke and the Industry representative for their
- 7 obvious passion in this work and in seeing it be
- 8 successful.
- 9 CHAIRMAN WEISENMILLER: That's good. Now, I
- 10 was going to mention that I also appreciate Vice Chair
- 11 Boyd's interest in this and passion on this, pushing
- 12 it through. I would note that I think every time I
- 13 talk to Kip, Kip leads out by reminding me that the
- 14 Executive Order was by the last Governor. I then
- 15 remind him that, until this Governor rescinds it, I
- 16 think it's still a directive document, but this area,
- 17 the Bioenergy Action Plan, is certainly not without
- 18 controversy and certainly Kip also then questions the
- 19 amount of resources we're spending on it. So, in
- 20 terms of all the suggestions that we could spend a lot
- 21 more on it, I can say I at least have one voice in my
- 22 ear saying, "Don't go there." But, again, I think
- 23 it's a very good product. I think it's time to move
- 24 on. We certainly appreciate -- all of our products
- 25 can always be made better in some case, but I think as

- 1 Chair Schweikart always used to say, "At some point
- 2 the 'better' becomes the enemy of the 'good.'" You
- 3 can spend forever and not get to a conclusion. So,
- 4 again, thank you everyone for their hard work on this
- 5 would be my comment.
- 6 VICE CHAIR BOYD: Well, thank you all for
- 7 your comments and I think, first, now what I want to
- 8 do is thank both Garry O'Neill and John Nuffer for all
- 9 that they have done. I've been very impressed and
- 10 pleased with their enthusiasm and tireless efforts in
- 11 putting this plan together. Interagency efforts are
- 12 difficult, it is truly like herding calves and I think
- 13 the document we have in front of us, as imperfect as
- 14 some may feel it is, represents progress in this
- 15 arena. I want to thank my Advisor, Sarah Michael, who
- 16 has tirelessly pushed this subject, working very hard
- 17 to gain the input and gain the support of other State
- 18 agencies who have committed to this list of actions,
- 19 that I indicated I will be reminding them of that
- 20 commitment in the not too distant future, and all of
- 21 which is hoped to facilitate Bioenergy development in
- 22 California. The plan is not as ambitious as I would
- 23 have liked and we all have academic wishes that far
- 24 exceed the real world possibilities. I didn't realize
- 25 that former Chairman Schweikart was the user of one of

- 1 my favorite expressions, "Don't let the perfect be the
- 2 enemy of the good," and we constantly have to deal
- 3 with that, and I'm glad to join him in the use of that
- 4 comment. We know additional progress needs to be
- 5 made, it is very difficult to get State agencies to
- 6 commit to timetables and specific actions, and you
- 7 struggle to not come up with the least common
- 8 denominator type of a program.
- 9 I've served as Chairman of this Interagency
- 10 Working Group since its creation and, maybe by way of
- 11 background, the genesis, I think, of the State's work
- 12 in Bioenergy area probably began at this Commission a
- 13 long long time ago because, when I was the Executive
- 14 Director of the Air Resources Board, I got drafted
- 15 into activities of this agency in its efforts to keep
- 16 alive the earliest Biomass facilities as they faced
- 17 their first what has turned out to be years of cliffs
- 18 of survival. I also got involved in it because the
- 19 Department of Forestry was persisting in burning up
- 20 everything in sight and, as an air quality person,
- 21 that had to be changed and the Ag industry used to
- 22 burn everything and, as an air quality person, that
- 23 had to change. So, that began the synergism of what
- 24 has been decades of work in this area. When I was
- 25 Deputy Secretary of the Resources Agency many years

- 1 ago, Secretary Nichols allowed me to start a Bioenergy
- 2 Interagency Working Group of sorts. When I came here,
- 3 the responsibility for that was delegated to this
- 4 agency, with a few other things that followed me over
- 5 here. The newly elected Governor Schwarzenegger,
- 6 then, revitalized the group, called for the creation
- 7 of a new group, and laid out some goals and objectives
- 8 for us to pursue, and that was done in the Action Plan
- 9 in his subsequent Executive Order, and as has been
- 10 debated quite a bit lately, the current findings, as I
- 11 understand it, that the directives of the Governor's
- 12 Executive Order continue as State policy into
- 13 succeeding administrations, unless repealed. And I
- 14 have not seen any effort to repeat. I think this
- 15 Governor will speak out on this subject once he gets a
- 16 few other issues under control.
- 17 Anyway, as a result of all of the above, the
- 18 Commission and our partners continue to be tasked to
- 19 implement the Action Plan and to work to meet the
- 20 State's goals, and we'll do that. There's a strong
- 21 synergy as we've noted between the Action Plan and the
- 22 policies articulated in Governor Brown's Clean Energy
- 23 Plan, particularly his renewable energy goals, which
- 24 start at 12,000 megawatts of localized energy and
- 25 distributed generation. The Bioenergy Plan calls for

- 1 the utilization of our waste resources, as I've
- 2 referenced, agriculture, forest and urban waste, you
- 3 know, dairy waste, landfill gas, wastewater treatment
- 4 activities, and this is localized use in perhaps its
- 5 most efficient form and example. And as indicated
- 6 earlier today, Waste Management produces fuels from
- 7 landfill gas for its fleet of garbage trucks, and
- 8 we've got many examples, many of the AB 118 projects
- 9 fulfill some of those goals. The Governor has stated
- 10 his support for the development of compatible
- 11 renewable energy facilities in the Ag sector, and here
- 12 is where Bioenergy really hits a big bull's eye, Dixon
- 13 Ridge Farms makes renewable energy from a generator
- 14 that runs off walnut shells, cuts their energy costs
- 15 by about \$45,000 from their \$250,000 energy cost.
- 16 Gills Onions Waste Energy Project is the first food
- 17 facility to use 100 percent of its output for
- 18 electricity needs; this is PIER success story, it was
- 19 PIER Programs that even brought that project to
- 20 fruition, and this agency, along with Gills Onions,
- 21 last year, were given a significant award in the Green
- 22 Energy Summit for that activity; Fiscallini Farms in
- 23 Modesto has been referenced before and has gotten
- 24 another project that my Advisor, Sarah Michael,
- 25 visited just yesterday with the groundbreaking for

- 1 that. The Governor wants to get the State agencies on
- 2 the same page as the speed of regulatory processes for
- 3 energy projects, and in this particular area, the
- 4 agencies have worked hard to coordinate our efforts
- 5 and have developed two programmatic Environmental
- 6 Impact Statements to streamline permitting, one of
- 7 which was done by the Regional Water Quality Control
- 8 Board under the auspices of the Water Board. So, that
- 9 was a very significant accomplishment relative to the
- 10 conversion of urban waste to energy, and we hope in
- 11 the next couple of years we'll see even more of this.
- 12 The plan calls for the creation of some form of
- 13 centralized permitting and a Web Portal for
- 14 developers, that has proven to be a very difficult
- 15 task for government and for all the four decades plus
- 16 that I've been involved in it, and yet we have assumed
- 17 it as a challenge to pursue in this arena because it
- 18 fits with what the Governor wants to do. So, there's
- 19 lots of challenges facing bioenergy development, not
- 20 the least of which is the difficult financial straits
- 21 we find ourselves in, the 2011 Plan attempts to
- 22 address many of them, and I therefore would like to
- 23 move its adoption.
- 24 COMMISSIONER DOUGLAS: Second.
- 25 CHAIRMAN WEISENMILLER: Okay, all in favor?

- 1 (Ayes.) It's unanimous. Thank you.
- 2 CHAIRMAN WEISENMILLER: As indicated, Item
- 3 11 has been held, so we're looking at Item 12, the
- 4 Minutes. Possible approval of the March 9, 2011
- 5 Business Meeting Minutes.
- 6 VICE CHAIR BOYD: Move approval.
- 7 COMMISSIONER DOUGLAS: Second.
- 8 CHAIRMAN WEISENMILLER: All in favor?
- 9 (Ayes.) That is also approved.
- 10 Item 13. Commission Committee Presentations
- 11 and Discussions. Jim, I know you've been busy.
- 12 VICE CHAIR BOYD: Well, I will just defer to
- 13 Carla first.
- 14 COMMISSIONER PETERMAN: Thank you. I just
- 15 want to report back on a meeting that Chair
- 16 Weisenmiller and myself and a few staff had yesterday.
- 17 Yes, we met with some representatives from Google who
- 18 were involved in some of their energy initiatives to
- 19 discuss potential collaboration between the CEC and
- 20 Google. Some interesting opportunities could emerge,
- 21 and one area, in particular, is some assistance with
- 22 mapping and improved mapping of our environmental and
- 23 biological conditions, as well as the conditions of
- 24 the electricity and natural gas infrastructure.
- 25 Improved mapping will assist the CEC, developers, the

- 1 public, and various stakeholders, a we try to site
- 2 more renewables on previously under-reviewed areas.
- 3 In addition, there is a significant amount of data
- 4 that the CEC has going back to its beginning that
- 5 might be useful in siting cases, as well, that we
- 6 currently don't have digitized, or it's not as easily
- 7 accessible to the public or developers, and so we're
- 8 also speaking with them about better management and
- 9 use of that data. So, look forward to seeing what
- 10 opportunities might emerge.
- 11 VICE CHAIR BOYD: That's fascinating since
- 12 Google Maps helped us a lot in the PIER Programs for
- 13 climate research, and there's a very significant
- 14 output that was generated from that, so that's very
- 15 encouraging.
- 16 What I'd like to mention, fellow
- 17 Commissioners, is the Japan earthquake and the
- 18 consequences thereof. One of my other duties, as a
- 19 required kind of thing a long time ago, was to be the
- 20 State's liaison for the Nuclear Regulatory Commission,
- 21 which somebody told me once was no big deal. It's
- 22 been rather busy most of my career here, but it's been
- 23 exceptionally busy in the better part of the last
- 24 week, the incredible tragedy in Japan. I mean, to be
- 25 hit with one of the largest earthquakes on record, to

| 1 | have | an | almost. | immediate | Tsunami | t.hat. | damaged | the |
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- 2 people and their infrastructure, and the nuclear plant
- 3 which became the third horseman of the apocalypse to
- 4 visit them, has left everybody shaken. But we, this
- 5 agency, and our lone heroic senior Nuclear Advisor,
- 6 Barbara Byron, who is a Retired Annuitant, even she
- 7 put in an incredible amount of time in on this
- 8 project, but we followed this situation, the first
- 9 issue for us was the Tsunami Alert and a concern about
- 10 that event and what the magnitude, the timing and the
- 11 magnitude, and the duration might be, and whether it
- 12 would affect California's infrastructure, a major
- 13 concern, of course, was the two nuclear the coastal
- 14 nuclear plants, and an additional nuclear fuel storage
- 15 facility on the coast. While we weathered that issue
- 16 quite easily, not true for, let's say, the people in
- 17 Crescent City and the people in the harbor in Santa
- 18 Cruz, but that part of our concern was taken care of
- 19 by late Friday of last week; however, everybody then
- 20 turned their alert status up, quite frankly, to follow
- 21 what was happening in the nuclear power plants in
- 22 Japan and, to this day, we still with fingers crossed
- 23 follow that situation. That generated an incredible
- 24 amount of concern and interest in California's nuclear
- 25 power facilities, there was a hearing at the beginning

- 1 of this week, a very lengthy hearing by the Special
- 2 Committee in the Senate, on earthquake preparedness,
- 3 and what have you. And I guess the hearing started at
- 4 noon and ended at 5:30 with a brief break for a floor
- 5 session. But there's been a lot about it in the
- 6 Press. And we are, of course, the locust of a lot of
- 7 attention because this agency several years back,
- 8 pursuant to legislation offered by then Assemblyman
- 9 Blakeslee, undertook a very extensive review as
- 10 provided by that legislation of the impacts upon
- 11 California's energy system that could occur as a
- 12 result of the loss of our two most significant plants,
- 13 mainly, our two nuclear plants. And secondly, and
- 14 maybe the major thrust, was seismic concerns relative
- 15 to those two plants, and we and the utilities in
- 16 question and the PUC and many State agencies have
- 17 since that time been engaged in continuing dialogue
- 18 about concerns. The IEPR, the 2008 and 2009 IEPR,
- 19 this agency went to great lengths to discuss the
- 20 subject and predicated upon a very in-depth consultant
- 21 report by an organization known as MRW, and I think
- 22 the "W" is sitting to my right, on that subject, which
- 23 was landmark in terms of for 30 years the issue had
- 24 not been pursued with much interest, and basically
- 25 this agency has the responsibility to find that, you

- 1 know, to not every license a power plant, a nuclear
- 2 power plant, unless there's a finding that the Federal
- 3 Government has finally solved the waste problem and,
- 4 of course, this agency has found that they haven't.
- 5 In any event, there remain concerns about seismic
- 6 activity in California and off the Coast of
- 7 California. New faults have been discovered and we
- 8 are arm wrestling with at least one of the two
- 9 utilities over them completing recommendations made by
- 10 this agency, which has no regulatory authority over
- 11 them, and so we work with the PUC to carry out three
- 12 seismic studies of some of the latest discoveries of
- 13 earthquake faults. That issue has been dragging
- 14 agonizingly along; the tragedy in Japan, I have a
- 15 feeling, will result in, and has resulted, in new
- 16 attention, particularly by the Legislature, on this
- 17 subject. And I'm sure there will be continuing
- 18 negotiations with the one utility that has already
- 19 filed for its relicensing, even that and licenses
- 20 don't expire until the 2020's, long after we've all
- 21 left this body, most likely, but there will be more to
- 22 follow, the workload will continue for quite some
- 23 time. I will say that Senator Blakeslee who sat in on
- 24 the hearing really lit into that one utility in
- 25 California that has taken an exceptional amount of

- 1 criticism of late, and if they don't succumb to do all
- 2 the studies of seismicity that were called for by this
- 3 agency and echoed somewhat by the PUC, he has promised
- 4 legislation to see that it does occur. So, we will by
- 5 necessity be continuing to follow the subject, which
- 6 does consume a fair amount of folks' time. So, enough
- 7 said, that's kind of the most recent reading on the
- 8 situation, unfortunately we don't exactly know when we
- 9 will end the concern for radiological releases from
- 10 the plants in Japan, they struggled mightily to keep
- 11 that issue under control. We don't have boiling water
- 12 reactors in California, and I've not paid that much
- 13 attention to them over the years, and I was surprised
- 14 to learn that their spent fuel pool was four stories
- 15 in the air above the reactor that's not in the ground
- 16 like giant swimming pools, as are the California
- 17 reactor power plant, spent fuel pools, but we use
- 18 pressurized water, of course, as does most of this
- 19 country. Anyway, I best stop, otherwise I could go on
- 20 and on and on. This is quite an issue and we have one
- 21 immense friend in Senator Blakeslee, I just hope it
- 22 pits us well in other areas. But he continues to
- 23 champion and speak about the good work of this agency
- 24 in this particular area, and it's nice to have a
- 25 friend once in a while.

- 1 CHAIRMAN WEISENMILLER: Well, certainly,
- 2 Vice Chair. All of us appreciate your efforts on
- 3 this, as you've been passionate in the spotlight on
- 4 Bioenergy area, certainly the nuclear stuff has moved
- 5 into a major major issue with the state. And you and
- 6 certainly Barbara have stepped forward to help the
- 7 decision makers try to make sense out of this, and
- 8 sort of the I want to say cloud of confusion of
- 9 what exactly is going on in Japan and what are the
- 10 implications for us.
- 11 VICE CHAIR BOYD: Well, I thank you for that
- 12 and I feel very good about the fact that, when I do
- 13 leave this body at the end of this calendar year, that
- 14 you are here to take up the baton and continue the
- 15 interest because you have an incredible background in
- 16 this subject area. And as I said, the W in the MRW
- 17 report is our Chairman and he has a lot of knowledge
- 18 in this subject area. And we have consulted a lot in
- 19 the last week on this issue.
- 20 CHAIRMAN WEISENMILLER: Thank you.
- Item 14. Chief Counsel's Report?
- MR. LEVY: I have no report today.
- 23 CHAIRMAN WEISENMILLER: Item 15. Executive
- 24 Director's Report?
- MS. JONES: I have nothing to report today.

| 1  |           | CHAIRMAN WEISENMILLER: Item 16. Public       |
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| 2  | Advisor's | Report.                                      |
| 3  |           | MS. SADLER: I have nothing to report today.  |
| 4  |           | CHAIRMAN WEISENMILLER: Item 17. Any public   |
| 5  | Comment?  | This meeting is adjourned.                   |
| 6  | (Whereu   | oon, at 11:35 a.m., the business meeting was |
| 7  |           | adjourned.)                                  |
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